

CLAIMS

1. Gear shifting system for idler wheels (3) comprising sliding sleeves (2), which are connected torsion-resistant with a main shaft (1) and can be connected form-locking with an idler wheel (3) to be shifted by means of axial displacement, whereby actuation of the respective sliding sleeve (2) is provided through at least one adjusting unit (4), which selects an actuator such that a shifting actuation of the respective sliding sleeve (2) is possible.

2. Gear shifting system in accordance with claim 1, characterized in that the adjusting unit (4) has an electric servo-motor.

3. Gear shifting system in accordance with claim 1 or 2, characterized in that a pin (5) is provided as the adjusting unit.

4. Gear shifting system in accordance with claim 2, characterized in that the pin (5) is provided eccentrically on the motor shaft (6) of the servo-motor.

5. Gear shifting system in accordance with one of the above claims 2 through 4, characterized in that at least one detection device (12) is provided for detecting the rotational positions of each motor shaft.

6. Gear shifting system in accordance with claim 5, characterized in that the detection device (12) is integrated into each adjusting unit (4).

7. Gear shifting system in accordance with one of the above claims, characterized in that two adjusting units (4) are provided on each sliding sleeve (2), whereby the adjusting units (4) are arranged offset about the main shaft (1) at an angle of about 180° .

8. Gear shifting system in accordance with one of the above claims, characterized in that a central control unit (11) is provided for the vehicle-coordinated shifting operation.

9. Gear shifting system in accordance with claim 8, characterized in that the central control unit (11) is a computer.